

ABSTRACT OF THE DISCLOSURE

A method of identifying nucleic acid samples comprising:
providing a microarray including a substrate coated with a composition including
a population of nucleic acid probe modified micro-spheres immobilized in a
5 coating containing a gelling agent or a precursor to a gelling agent, wherein a first
portion of the micro-spheres is submerged in the gelatin coating and a second
portion is exposed above the gelatin coating and is substantially free of gelatin, at
least one sub-population of the population micro-spheres containing an optical
barcode generated from at least one colorant associated with the micro-spheres
10 and including a nucleic acid probe sequence; contacting the array with a target
nucleic acid sequence; and detecting the color barcode of the sub-population of
micro-spheres due to the interaction of the probe nucleic acid sequence and the
fluorescently/chemiluminescently labeled nucleic acid sample target nucleic acid
sequence.